

NXT SECURES US \$4.73 MILLION SFD® SURVEY CONTRACT WITH PETROLEOS MEXICANOS ("PEMEX")

HIGHLIGHTS

- NXT receives initial contract with PEMEX, the National Oil Company of Mexico
- PEMEX project to be completed by Q4, 2012
- NXT is on track for record revenue year
- NXT to commence previously announced South Asia US \$2.67 million contract in September

CALGARY, ALBERTA, September 12, 2012 - NXT Energy Solutions Inc. ("NXT" or the "Company") (TSX-V:SFD; OTC:NSFDF) is pleased to announce that it has been awarded a contract to conduct a US \$4.73 million SFD® survey for Petrolēos Mexicanos ("PEMEX"), the National Oil Company of Mexico. PEMEX is the 4th largest Exploration & Production Company in the world, with current production of approximately 2,500,000 barrels per day (boed).

The contract has been formally awarded to NXT, and final documentation is being moved through PEMEX's internal signatory process with most of the signatures received. Therefore, NXT has gone forward with SFD® data acquisition and interpretation operations in Mexico.

PEMEX's award of the contract was based on an extensive period of technical review, commercial review and validation and a test flight of NXT's patent pending technology. The SFD® project covers large offshore and onshore areas. SFD® data acquisition will be completed in September, with delivery of NXT's recommendations in December, 2012.

"We are delighted to have been awarded our first contract and look forward to a long-term relationship with PEMEX" said George Liszicasz, NXT's President and CEO. "Adding this premiere client from an untapped market builds upon our growth strategy to expand SFD® adoption throughout our core area in Latin America. Within a 12 month period we will have conducted survey operations in Colombia, Argentina, Guatemala and now Mexico. We intend to build on this significant new development, and are actively pursuing new client prospects in Brazil, Colombia, Ecuador, Paraguay, Peru and Belize."

NXT intends to mobilize to South Asia to commence flying its previously awarded US \$2.67 million survey following completion of the data acquisition phase of the PEMEX project. Both projects are expected to be completed and delivered in Q4 2012, giving NXT a record year in revenue.

As previously announced, NXT will be opening the TSX Exchange by "Ringing the Bell" in Toronto on Friday, September 14, 2012 and is today (September 12) hosting an investor and media conference call at 1:00 PM MST (3:00 PM EST) to discuss our O2 results, this significant new contract, and other developments.

NXT's management invites all interested parties to participate in this call, by using one of the applicable numbers below:

Conference Code: 776268

Participant access code: 5034838 (followed by the "#" key)

1-877-385-4099 (Toll Free Canada & USA)

613-212-4220 Ottawa 514-395-9913 Montreal 604-899-2339 Vancouver 403-232-0994 Calgary 780-421-1483 Edmonton

416-883-0133 Toronto

NXT is a Calgary based company whose proprietary airborne Stress Field Detection ("SFD®") survey system provides a proprietary survey method that can be used both onshore and offshore to remotely identify potential hydrocarbon traps and reservoirs. The SFD® survey system enables our clients to focus their hydrocarbon exploration decisions concerning land commitments, data acquisition expenditures and prospect prioritization on areas with the greatest potential. SFD® is environmentally friendly and unaffected by ground security issues or difficult terrain, and is the registered trademark of NXT Energy Solutions Inc. NXT provides its clients with an effective and reliable method to reduce time, costs, and risks related to exploration.

This news release does not constitute an offer to sell or a solicitation of an offer to buy any of the securities in the United States. The company's securities have not been and will not be registered under the United States Securities Act of 1933, as amended (the "U.S. Securities Act") or any state securities laws and may not be offered or sold within the United States unless an exemption from such registration is available.

Forward-Looking Statements

This news release may include forward-looking statements. When used in this document, words such as "intends", "plans", "anticipates", "expects" and "scheduled", are forward-looking statements. Forward-looking statements are subject to a wide range of risks and uncertainties, and although the Company believes that the expectations represented by such forward-looking statements are reasonable, there can be no assurance that such expectations will be realized. Any number of factors can cause actual results to differ materially from those in the forward-looking statements.

Specific forward looking statements include the planned timing and completion of the surveys in Mexico and South Asia. Specific risk factors related to the new PEMEX contract include weather conditions and other local factors, which may adversely impact NXT's ability to conduct the survey, and potential performance penalties, which are standard clauses for these types of contracts.

For further information, please contact:

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